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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,496	02/26/2004	David C. Nemir	70004-9601-CIP2	9093

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201 THIRD STREET, N.W.  
SUITE 1340  
ALBUQUERQUE, NM 87102

EXAMINER
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A, MINH D

ART UNIT	PAPER NUMBER
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2821

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H/A

**Office Action Summary****Application No.**

10/789,496

**Applicant(s)**

NEMIR ET AL.

**Examiner**

Minh D. A

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,27-40, 42-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 27-40, 42-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***DETAILED ACTION***

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

This is a response to the Applicant's filing on 2/27/06. In virtue of this filing, claims 1, 27-40, 42-55 are currently presented in the instant applicant.

Claims 2-26, 41 are cancelled.

***Claim Objections***

2. Claims 53-54 are objected to because of the following informalities:

Claim 53, should be "the apparatus of claim 52". Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 27-36, 38-40, 42-49, 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Fowler et al (US 5,710,691).

Regarding claim 1, Fowler discloses a programmable control unit for outlet adapter and an apparatus being entirely resident within an appliance plug( see figure 4), the plug comprising power delivery conductors(100a) and the apparatus comprising a programmable controller(130) for programming exclusively through a plurality of the

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power delivery conductors (100a). See figures 1 and 3-4, col.2, lines 1-67 to col.3, lines 1-20.

Regarding claim 27, Fowler discloses the plurality numbers conductors no more than four. See figures 3-4.

Regarding claim 28, Fowler discloses wherein two of conductors no more than four are electrically shorted together such that said plurality of power delivery conductors consists of not more than three electrically unique power delivery conductors. See figure 4.

Regarding claim 29, Fowler discloses the control processor (130) for applying two of said not more than three electrically unique power delivery conductors. See figures 1 and 4.

Regarding claim 30, Fowler discloses wherein said programming signal comprises time pulse. See col.2, lines 15-67.

Regarding claims 31-32, Fowler discloses wherein a mixture of direct and alternating current signals is applied to two of said three electrically unique power delivery conductors. See figures 1 and 3-4.

Regarding claim 33, Fowler discloses the mixture of direct and alternating current signals places said programmable controller (16) into a programming mode. See figures 1 and 4.

Regarding claims 34-35, Fowler discloses wherein at least one of said signals comprises a high frequency signal or wherein said programmable controller is electronically configured to implement a set of control actions. See figures 1-4.

Regarding claim 36, Fowler discloses the programmable controller comprises a microcontroller. See figure 1.

Regarding claim 38, Fowler discloses the programmable controller (130) is programmed via electronic signals from a programmer. See figure 1.

Regarding claim 39, Fowler discloses wherein the controller is programmable after said apparatus is assembled and the controller of the apparatus is entirely resident within said appliance plug or a plug-in module. See figures 1-4.

Regarding claim 40, Fowler discloses wherein said apparatus enables an appliance electrically connected thereto to operate in a manner different from that originally intended. See figures 1-4.

Regarding claim 42, Fowler discloses a programmable controller(130) for providing an appliance plug or a plug-in module; disposing the programmable controller (130) within the appliance plug or plug-in module(100a); providing a plurality of electrical power delivery conductors; programming the controller by applying one or more signals to two of the power delivery conductors. See figures 1 and 3-4, col.2, lines 1-67 to col.3, lines 1-20.

Regarding claim 43, Fowler discloses the programming step comprises applying one or more signals to no more than three of the power delivery conductors. See figure 4.

Regarding claim 44, Fowler discloses a plug (100a) comprising programming the programmable controller with electronic signals communicated from a programmer to the controller through one or more of the power delivery conductors after the controller

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has been disposed in the appliance plug or plug-in module. See figures 1 and 3-4, col.2, lines 1-67 to col.3, lines 1-20.

Regarding claim 45, Fowler discloses a high frequency signal to two of the power delivery conductors to place the programmable controller into a programming mode. See figure 4.

Regarding claim 46, Fowler discloses a series of pulses applied to two of the power delivery conductors to control both data and clock lines during programming. See figures 1-4, col.2, lines 36-67 to col.3, lines 1-25.

Regarding claim 47, Fowler discloses a mixture of direct current and alternating current signals to two of the power delivery conductors to place the programmable controller into a programming mode. See figures 1-4.

Regarding claim 48, Fowler discloses the programmable controller to implement a set of control actions. See figures 1-2.

Regarding claim 49, Fowler discloses a programmable controller comprises providing a microcontroller. See figure 1.

Regarding claim 51, Fowler discloses a controlling an appliance by programming the programmable controller so as to enable the appliance to perform in a manner different from its original design. See figures 1-4.

5. Claims 52-54 are rejected under the best understood 35 U.S.C. 102(b) as being anticipated by Chang (US 5,477,279).

Regarding claim 52, Chang discloses a circuit for saving power consumption in standby state comprising: a programmable controller (109); and electrostatic discharge

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protection diodes (D1 and DZ1) internal to said programmable controller(109) and excluding (102) for rectifying a DC power supply external to said controller(109); wherein said internal electrostatic discharge protection diodes (D1 and Zener diode) provide a source of direct current(DC) for said controller(109). See figures 1-4, col.3, lines 1-67 to col.5, lines 1-40.

Regarding claim 53, Chang discloses each of said internal electrostatic discharge protection diodes (D and D1) are paralleled by transistor (106 or Q3) that forms an alternative conducting path around said internal electrostatic discharge protection diodes (D and D1). See figure 3.

Regarding claim 54, Chang discloses the alternative conducting path allows firing of a transistor during a portion of an AC cycle when said internal electrostatic discharge protection diodes are not conducting. See figures 1-4.

Regarding claim 55, Chang discloses a transistor that is in parallel with one of said internal electrostatic discharge protection diodes, wherein while applying a gate voltage to said MOSFET ensures that is turned on. See figures 1-4.

### **Claim Rejections - 35 USC § 103**

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 37 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Fowler et al (US 5,710,691) in view of Chang (US 5,477,279).

Regarding claims 37 and 50, Fowler discloses the controller controls for protecting an appliance connected to a household.

Fowler does not discloses the controller control selected from the group consisting of thyristors , transistor , triac and combination.

Chang discloses the microprocessor having transistors (106-108). See figure 3.

It would have been an obvious to one of ordinary skill in the art at the time the invention was made to employ the transistors such as that suggested by Chang in the program control unit of Fowler to turn on or off DC voltage from rectifying circuit and consume little static power for voltage and current.

#### ***Citation of relevant prior art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art Chapman et al. (U.S. Patent No. 6,150,940) discloses a an antitheft electrical power cord.

Prior art Mai et al (U.S. Patent No. 5,643,4012) discloses safety plug with switch means.



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***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 AM-2:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner

Minh A

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4/25/06



**THUY V. TRAN**  
**PRIMARY EXAMINER**